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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,229

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Martin Brodt

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EXAMINER

OMGBA, ESSAMA

ART UNIT

PAPER NUMBER

3726

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,229	Applicant(s) BRODT ET AL.	
	Examiner Essama Omgba	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-12, 15-21 and 24-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-12, 15-21 and 24-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 10-12, 16-21 and 25-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Kefferstein et al. (US Patent 6,564,604) and Shtikan et al. (US Patent 7,192,624).

With regards to claims 10, 11, 20 and 21, Applicant, at pages 1 and 2 of the specification to be known as AAPA, discloses a process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet, wherein a steel semi-finished product pre-coated with a corrosion prevention layer is formed into a component blank using a cold-forming process, the component blank is subsequently trimmed, and heating and press-hardening the trimmed component blank by hot-forming takes place. AAPA does not disclose covering the press-hardened component blank with a corrosion-prevention layer in a coating step. However it is known to post treat finished components that have been hardened against corrosion as attested by Kefferstein et al., see column 1, lines 22-35. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to have post treated the press-hardened component blank of AAPA against corrosion, in light of the teachings of Kefferstein et al., in order to increase the component resistance to corrosion. Although Kefferstein et al. does not specifically disclose the corrosion prevention treatment being a prevention layer deposited by thermal diffusion, however

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Shtikan et al. teaches depositing a Zinc type corrosion protection layer on a component by thermal diffusion, see column 1, lines 19-27. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a thermal diffusion process to coat the press-hardened component blank of AAPA/Kefferstein et al. with a Zinc corrosion-preventing layer, as taught by Shtikan et al., as is known in the art. Applicant should note that the press-hardened components of AAPA are bodywork components.

With regards to claim 12, Applicant should note that cold-forming processes such as drawing are old and well known in the art.

For claims 16-19, Applicant should note that the steps of cleaning the surface of a component by blasting the surface with glass particles prior to the coating step, and conditioning the component after the coating, in order to remove foreign matter and enhance coating adhesion for example, are old and well known in the art.

For claims 25-30, Applicant should note that such method steps are old and well known in the art.

For claims 31-34, Applicant should note that it is within the general knowledge of one of ordinary skill in the art to choose the optimum parameters of the diffusion process in order to provide an effective corrosion-preventing coating on the press-hardened component blank.

3. Claims 15 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA/Kefferstein et al./Shtikan et al. as applied to claims 10 and 20 above, and further in view of Warichet et al. (US Patent 6,921,439).

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AAPA/Kefferstein et al./Shtikan et al. discloses a process for producing a press-hardened component as shown above. Although AAPA/Kefferstein et al./Shtikan et al. does not explicitly disclose dry cleaning the press-hardened component blank prior to the coating step, however it is known to dry clean steel articles before such coating step in order to assure adherence, continuity and uniformity of the Zinc coating as attested by Warichet et al., see column 1, lines 16-26. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to have dry-cleaned the press-hardened component blank of AAPA/Kefferstein et al./Shtikan et al. prior to coating, in light of the teachings of Warichet et al., in order to ensure adherence, continuity and uniformity of the Zinc coating.

4. Claims 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA/Kefferstein et al./Shtikan et al. as applied to claims 10 and 20 above, and further in view of Levinski et al. (US Patent 6,171,359).

AAPA/Kefferstein et al./Shtikan et al. discloses a process for producing a press-hardened component as shown above. Although AAPA/Kefferstein et al./Shtikan et al. does not explicitly disclose the thermal diffusion process including the steps of placing the press-hardened, trimmed component blank, a plurality of other press-hardened, trimmed component blanks and a zinc-containing powder into a drum and closing the drum, introducing the drum to a coating installation, and heating the drum at approximately 5 to 10 K/min to approximately 300 degrees Celsius and rotating the drum during the heating, and wherein after the step of heating the drum, discharging the drum from the coating installation and cooling the drum in a cooling station, However

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Levinski et al. teaches that thermal diffusion process typically comprises placing of cleaned articles into a drum filled with zinc powder, sealing the drum and heating up to the temperature within the range 380-450 degrees Celsius and isothermal heating for 1-4 hours and rotating the drum with a small velocity during the heating, see column 1, lines 31-50. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have coated the press-hardened, trimmed component blanks of AAPA/Kefferstein et al./Shtikan et al. using a thermal diffusion process as taught by Levinski et al., as is known in the art. Regarding the recitation of the drum being heated to approximately 300 degrees Celsius, Applicant should note that Levinski teaches that the drum could be heated up to the temperature range 380-450 degrees Celsius, which encompasses the claimed 300 degrees Celsius. Also the isothermal heating for 1-4 hours is structurally equivalent to the claimed heating at approximately 5 to 10 K/min. It is also inherent that the diffusion coated components would be discharged from the coating installation and appropriately cooled in a cooling station as is known in the art.

Response to Arguments

5. Applicant's arguments filed August 27, 2009 have been fully considered but they are not persuasive.

In response to Applicant's argument that none of the references, alone or in combination, discloses the step of "covering the press-hardened component blank with a corrosion resistant layer in a coating step, wherein the coating step includes a thermal

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diffusion process”, the examiner respectfully disagrees. It is well established that the test of obviousness is not that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Therefore as outlined in the above references, one of ordinary skill in the art would have found it obvious to protect the press-hardened trimmed component parts of AAPA against corrosion in light of the teachings of Kefferstein et al., and it would have also been obvious to use thermal diffusion coating since it is one of the known coating processes. In an obviousness analysis, it is not necessary to find precise teachings in the prior art directed to specific subject matter claimed because inferences and creative steps that a person of ordinary skill in the art would employ can be taken into account. *KSR Int’l Co. v. Teleflex Inc.* 550 U.S. 398,418 (2007). “A person of ordinary skill is also a person of ordinary creativity, not an automaton.” *KSR*, 550 U.S. at 421.

In response to Applicant’s argument that Shtikan operates at temperatures above those suitable for press-hardened trimmed blanks and the steels sheets of Kefferstein et al., the examiner submits that thermal diffusion coating is typically carried in drums heated up to about 370-450 degrees Celsius, this suggests that it is possible to carry the diffusion process at temperatures lower than 370 degrees Celsius for example. As stated above, “a person of ordinary skill is also a person of ordinary creativity, not an automaton.”

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Essama Omgba/
Primary Examiner, Art Unit 3726

eo
December 20, 2009